Gen. Hardwicke and Mr. Gray on Saurian Reptiles, &c. 213

Mr. Leadbeater is so liberal towards the lovers of science, I beg leave to introduce it in its proper place, as one of the chief ornaments of the North American Fauna.

Genus. TETRAO, L.

Sub-genus. TETRAO, Nob.

Tetrao urophasianus.—Head smooth: primaries unspotted: toes strongly pectinated: tail subcuneiform, of twenty narrow tapering feathers.

Male black? Female grey, mottled.

Inhabits the North Western countries beyond the Mississippi, especially on the Missouri.

Size of the *T. urogallus*, which species it represents in the New Continent.

ART. XXII. A Synopsis of the Species of Saurian Reptiles, collected in India by Major-General HARD-WICKE; By Major-General HARDWICKE, F.R. & L.S., and J. E. GRAY, F.G.S.

THE Reptiles which are described in the following pages are part of the collection of animals, formed by Major-General Hardwicke while on duty in various parts of India, where he had them figured while alive, generally by native artists, so as to indicate their natural colours and habits.

Specimens of most of these Reptiles have been brought to this country, and on their being compared with the drawings, it was found that every scale must have been counted, and the length and breadth of every part taken by actual admeasurement. We have thus reason to place great reliance on the accuracy of the drawings of those species, of which specimens had not been brought home; so much so, as to induce us to indicate and describe them also, stating the fact, at the end of the description, of their being characterized from the drawing alone.

Hitherto only twenty-seven species of this kind of Reptiles have been described as inhabiting India. Of these, ten are found in this collection; many of the others rest only on the authority of Seba, whose errors in regard to locality are discovered every day : and to these have been added thirteen new species, containing amongst them six new types of form, which have hitherto not been found in any other country; indeed all the species here described are peculiar to India, except the Chameleon, the Monitor, and one of the Crocodiles, which are common to Africa. The latter species proves M. Cuvier's opinion on the subject of the geographical distribution of the Crocodiles to be erroneous; for that naturalist, to whom we are indebted for the unravelling of the species of this genus, appears to have thought that each species was peculiar to a distinct country. The specimens and drawings of this collection, however, clearly demonstrate that the common Crocodile hitherto regarded as peculiar to Africa, is also spread over the continent of India.

The genera are arranged according to the Synopsis of Genera published in the Annals of Philosophy, and in the Philosophical Magazine for June, 1827.

As it is the intention of the writers of the present article to publish figures, with detailed descriptions, of each of the unpublished and unfigured species, the observations of Zoologists on any of the subjects noticed in it, will be most thankfully received.

ORDER. I. EMYDOSAURI.

Fam. 1. CROCODILIDÆ. Gen. 1. GAVIALIS, Oppel.

1. G. Gangeticus.

Lacerta Gangetica. Gmel. Syst. Nat. p. 1057. Gaviala Gangetica. Fleming, Phil. Zool. ii. 276. Gavialis Gangeticus. Geoffroy St. Hilaire, Mem. Mus.

Hist. Nat. Par. xii.

Icon. Edw. Phil. Trans. xlix. t. 19. Faujas, Hist. de la Mont. St. Pierre. t. 46-47. Cuv. Ann. Mus. x.t. 1.f.2. 11. and Oss. Foss. t. 1. f. 2. 11. Geoff. Mem. Mus. xii.

There are two drawings of this species in the collection, the specimens represented in which have only two nuchal scales, as is the case in the specimen in the British Museum. M. Cuvier figures four.

Gen. 2. CROCODILUS.

1. C. porosus. Schneid. Hist. Amph. ii. 150.

C. biporcatus. Cuv. Ann. Mus. x. 48.

Icon. Seba, 1. t. 104. f. 12. good. Cuv. Ann. Mus. x. t. 1. f. 4. 13. 18. 19. t. 2. f. 8. head and nuchal scales.

Inhabits the Ganges, Penang, and Sumatra, common,

2. C. Niloticus. Daud. ii. 367.

Croc. vulgaris. Cuv. Ann. Mus. x. 40.
Lacerta Crocodilus, (pars). Linn. Syst. Nat. i. 359. 1,
Icon. Geoff. Rept. d'Egypte. t. 2. f. 1. and 1*. very young. Cuv. Ann. Mus. x. t. 1. f. 5, 12. t. 2. f. 7, head and nuchal scales. Geoffroy, Ann. Mus. x. t. 4.

Inhabits the Ganges, and water tanks in the Carnatic.

In a drawing of a specimen eight feet long, from the Ganges, the nuchal scales are placed as in Cuvier's and Geoffroy's figures; but in a young specimen, from the water tanks at Madras, the lateral scales of the nuchal group are placed in the centre, opposite the division between the upper and lower series of scales. In a specimen about the same size in the British Museum, said to come fromIndia, they are placed similarly to the latter; as is also the case with a full grown specimen in Mr. Gray's possession from Africa.

ORDER II. SAURÆ.

Fam. 1. AGAMIDÆ. Gen. 1. AGAMA.

*. Head almost uniformly scaly; back crested; tail compressed, with two or more series of long scales beneath.

1. A. superciliosa.

Viridis, squamis uniformibus; supra dorsum tuberculis conicis raris brunneo-annulatis; superciliis elevatis carinatis; caudâ corpore duplo longiore, infrà planâ, squamarum seriebus duabus.

Lacerta superciliosa. Linn. Syst. Nat. i. 360. 4.

Scutated Lizard. Shaw, Zool. iii. t. 68.

Lophyre à casque fourchu. Lacerta Scutata. Cuv. Regne Anim. ii. 36.—not Linn. i. 360. 5.

Agama tigrina. Merrem, Rept. i. 50. 4. but not Syn. which belong to A. cristata. Merrem. Ib. 50. 3.

Lophyrus Gigas. Boié, Bull. Sci. Nat. ix. 235.

Agama gigantea. Kuhl, Beitr. 106.

Icon. Seba, Thesaurus, i.t. 100.f.2. Copied Shaw, Zool. iii. t. 68. low. fig.

Inhabits Bencoolen.

Length 12 inches; body $4\frac{1}{2}$; tail $7\frac{1}{2}$.

Green; eyebrows elevated, keeled; tail nearly twice as long as the body, beneath flat, with two series of long slender double pointed keeled scales. Scales uniform, small, with a few scattered conical tubercles on the back, each surrounded by a brown ring; teeth recurved, cut in behind.

2. A. armata. n. s.

Pallida, brunneo-marmorata; squamis lanceolatis carinatis; spinis trihedris raris supra dorsum et membra; superciliis carinatis, squamarum serie lævi in spinam longam posticè desinente; dorso serie spinarum gracilium cristato; caudâ seriebus pluribus squamarum longarum tetragonarum.

Inhabits Singapore.

Length 12 inches; body $5\frac{1}{2}$; tail $6\frac{1}{2}$.

Pale, marbled with black brown; scales lanceolate keeled, with some scattered trihedral spines on the back and upper parts of the legs. Eyebrows keeled, with a series of smooth scales ending behind in a long subulate spine; a tuft of three or four spines over each ear. Back crested with a series of long awl-shaped spines. Tail with several series of long quadrangular scales beneath; teeth conical erect.

** Head uniformly scaly; back crested; tail uniformly scaly.

3. A. vultuosa. Harlan.

Viridis, infra pallidé brunnea; capitis et corporis squamis parvis lanceolatis uniformibus, caudæ et membrorum majoribus, abdominis latis carinatis; dorsi cristâ brevi simplici; membris longissimis gracilibus; caudâ corpore sesquilongiore.

A. vultuosa. Harlan, Journ. Acad. N.S. Philad. iv. 296.

Icon. Harlan, Ibid. t. 19. Bad, the legs very short.

Inhabits Penang, called Girget.

Length $13\frac{1}{2}$ inches; body $4\frac{1}{2}$; tail 9.

Green, below pale whitish brown; scales of the head and body small, lanceolate uniform; of the tail and limbs larger, and of the belly broad, keeled; crest of the back short, simple; legs wery long, slender. Tail half as long again as the body.

4. A. Indica. n. s.

Pallidé virescens brunneo-marmorata, infra albida; capitis squamis parvis, corporis, membrorum, caudæque latis lanceolatis carinatis; parotidibus fasciculis duobus spinarum supra aures; cristâ spinarum simplicium compressarum ab occipite ad medium usque dorsum.

Inhabits Dumdum, common, Gen. Hardwicke. Java, Dr. Horsfield.

Length $12\frac{1}{2}$ inches; body $3\frac{1}{2}$; tail 9-10 inches.

Pale yellow green, marbled with brown; beneath whitish; scales of head small, of body tail and limbs broad lanceolate keeled; parotids with two bundles of spines above the cars; the

crest of simple compressed spines only extends from the occiput to the middle of the back; tail nearly three times as long as the body.

Called Ghirgit in Calcutta.

5. A. minor. n. s.

Brunnea obscuré marmorata, infra pallida; capite brevi; capitis caudæ membrorum abdominisque squamis ovatis obtusis; superciliis carinatis; supra aures fasciculis 2 spinarum; dorsi squamis latissimis, obtusé carinatis; cristå per totum dorsum, vix elevatå; caudå corpore breviore.

Var. capite dorsoque asperioribus.

Inhabits Chittagong. Var. Mhendy Ghat. Sandy plains. Length 6 inches; body 31; tail 21.

Brown, marbled with darker, and lower parts pale; head short; scales of head, tail, limbs, and belly, ovate, blunt; eye-brows keeled, with two bunches of spines over the ears; scales of the back very broad, blunt, keeled; the dorsal crest scarcely raised, extending the length of the back. Tail two-thirds the length of the body. From a drawing.

The variety has the back and the head more spinous,

*** Head uniformly scaly; back simple; tail uniformly scaly.

6. A. tuberculata. n. s.

Viridis flavo marmorata et punctata; squamis parvis ovatis, caudæ et membrorum externé majoribus, carinatis; femoribus seriebus 3—4 tuberculorum conicorum; caudà corpore duplo longiore, basi incrassatà, apice attenuatà.

Inhabits India.

Length 12 inches; body and head four; tail 8.

Green, marbled and speckled with yellow; scales small ovate, those of the tail and outer side of the limbs larger, keeled; hinder thighs, with three or four rows of conical tubercles behind; tail twice as long as the body, thick at the base, and tapering at the end; eyebrows keeled, smooth; teeth simple conical.

Gen. 2. DRACO. Linn.

1. D. abbreviata. n. s.

Squamis parvis; ad alarum marginem membrorumque posteriorum latera squamis ovalibus compressis ciliata; alis partim femoribus adnatis subtus maculatis; gulâ brevi, thoracem attingente.

Inhabits Singapore.

Length 12 inches; body 5; tail 7 inches.

Scales small, body on the edge of the wings and the sides of the hind legs fringed with compressed ovate scales; wings partly attached to the thighs, beneath spotted; the central pouch of the throat reaching to the thorax.

2. D. 5 fasciata. n. s.

Squamis parvis, caudæ paulo majoribus; membris posticis squamis ovatis compressis marginatis; alis fasciis quinque nigris cæruleo-marginatis; gulà thoracem longé superante.

Draco viridis. Kuhl, Beitr. 102?

Body 4 inches; tail 51 inches.

Scales small, those of the tail rather larger; hind legs edged with ovate compressed scales. Wings with five black bands, edged with blue. The central pouch of the throat reaching beyond the thorax.

3. D. viridis. Daud. Rept. iv. t. 41. good.

Pale, wings and body dotted, and marbled with black. Tail just twice as long as the body.

A drawing from an animal brought from Java.

Gen. 3. UROMASTIX.

1. U. Hardwickii. Gray, Mss.

Supra virescens nigro punctulata brunueoque marmorata; subtus pallidé brunnea; femoribus posticis maculà nigrâ ad basin internum; squamis membrorum parvis, infra corpus majoribus; tibiarum spinis sparsis; caudà supra annulis spinarum distinctis.

Inhabits the sandy plains of Kanouge, in Hindustan.

Greenish, punctulated with black, and marbled with brown

above; beneath pale brown, the thighs with a black spot on the base of the inner or front edge; scales small, those of the limbs and under side larger; hind legs with scattered, and the tail with distinct separate rings of spines on the upper surface; the outer spine on the edge of the tail the largest.

When old, the skin about the neck and shoulders becomes loose and folded.

Called by the Hindoos Saara: it is eaten by the lower castes.

2. U. Belliana. n. s.

Olivacea; dorso fasciis tribus longitudinalibus, cum seriebus quatuor macularum albarum nigro-marginatarum alternantibus; membris maculis albis ocellatis; lateribus nigro maculatis; squamis parvis, subtus paulo majoribus, caudæ parvis verticillatis.

Inhabits Penang.

Body 5, tail 9 inches.

Olive green; back with three pale black-edged longitudinal streaks, alternating with four rows of black-edged pale coloured spots; legs varied with pale black-edged spots, and the sides ornamented with square black spots; scales small, those of the lower parts rather larger, and those of the tail small and placed in verticillate bands; the bands of pores do not quite meet over the sub-anal region. From a drawing.

FAM. III. CHAMÆLEONIDÆ.

Gen. 1. CHAMÆLEO.

1. C. vulgaris.

Lacerta Chamæleon. Linn. Syst. Nat. i. 364. 20.

Lacerta caudâ tereti brevi. Linn. Amæn. Acad. i. 571. & i. 512.

Chamæleo vulgaris. Latr. Rept. 11. Daud, iv. 181. Chamæleon trapu. Geoff. Rept. d'Egypte. ?

Caméléon ordinaire. Cuv. Regn. An. ii. 52.

Icon. Seba. i. t. 82. f. 2. dry.—f. 1. in spirits. (Copied Ency. Meth. t.—f. 2.) Geoff. St. Hilaire, Rept. d'Egypte. t. 4. f. 3.

Skeleton. Seba. t. 82. f. 8. Copied Daud. Rept. i. t. 11. f. 1.

Chamæleo Mexicanus. Laur. Rept. 45.

Lacerta chamæleon. B. Gmel. Syst. Nat. i. 1069. 20.

Chamæleon calcaratus. Merrem, Rept. i. 162.

All from Seba. i. t. 82. f. 1. which has the slight expansion of the hinder part of the sole distorted into a distinct toe.

Perhaps also;

Chamæleo Africanus: Laur. Rept. 46.

Lacerta Africana. Gmel. Syst. Nat. i. 1069.60.

Chamæleon calcaratus (pars). Merrem, Rept. i. 162. All established from Seba, i. t. 83. f. 4.

Chamæleo Zealonicus. Laur. Rept. 46.

Chamæleon subcroceus. Merrem, Rept. i. 162. Both from Seba. 1. t. 82. f. 3.

Inhabits Africa and India. " Egypt, Barbary, and South of Spain," Cuvier. Central Africa, Colonel Denham. India, Gen. Hardwicke. Tripoli, Mr. Ritchie. Egypt, Geoffroy.

This species, which is evidently the one originally described by Linnæus, is known by the peculiar pyramidical form of the occiput, by the single large irregular quadrangular flat space on the cheek, (which is double in *C. pumila*), and by the slightly crested denticulated white line from the chin to the vent. The teeth are rarely (as they are described to be by Cuvier) slightly 3-lobed, which is an anomaly in those Lizards which have them placed on the edge of the jaw. When the animal is alive and in health, the angles of the occipital pyramid and the lines on the side of the face are completely obliterated. It is distinguished from a species from Central Africa, by the occipital keel extending to the centre of the eye, by the back of the head being only slightly lobed, and by the frontal scales being tubercular.

Fam. IV. GECKOTIDE.

Gen. 1. PTEROPLEURA. n. g.

Digitis palmatis ad basin usque dilatatis, squamis latis uniseriatis indivisis, ultimo articulo adunco libero, pollice mutico;

poris femoralibus nullis; corporis et membrorum lateribus fimbriatis.

This genus can be confounded only with the Uroplates of Daudin, from which it may immediately be distinguished by the toes being completely webbed, by the scales of their under side being broader towards the extremities, and entire, and by the last joint, which bears the claw, being raised up and exposed, while in the Uroplates it is inclosed in the groove of the scales, and completely hid from view; indeed the formation of the toes is similar to that of the Platydactyles and Geckos, but it differs from them in their being webbed, and in the membranes on the sides of the body, which appear to indicate very different habits.

1. P. Horsfieldii. n. s.

Supra pallidé fusca, nigro-fusco maculata; infra albida.

Pteropleura Horsfieldii. Gray, Phil. Mag. July, 1827. Inhabits India. Singapore, Gen. Hardwicke. Java, Dr. Horsfield.

Head and body depressed; above pale brown, with irregular shaped dark spots, with a darker margin on each side of the body just above the lateral fringe, two round spots on the back of the neck, two sub-quadrangular larger spots over the shoulders, and four irregular wavy bands at nearly equal distance from one another; the scales of the upper part of the body are small and even, those of the upper side of the limbs and tail and lower part of the body are rather larger; the labial scales are very large, and the central one of the upper jaw is broad, and furnished with one large central and two smaller ones on its upper edge. The sides of the head, between the angle of the mouth and the ear, just behind the ear, the front and hinder edge of the fore legs, the side of the body, from the fore to the hind legs, the bend of the outer and the whole of the inner edge of the hind legs, are furnished with a membranaceous fringe, which is covered with rather large, broad, quadrangular scales, placed in cross bands on the upper side, naked and smooth beneath, except the fringe on the side of the head, which is covered with reticulated scales above, and smaller ones beneath. Tail depressed, edge slightly expanded.

Length of the animal 5 inches; head 1; body 2; tail 2. The breadth of the expansion on each side of the body half an inch. It differs from the *Ptychozoon* of Kuhl, by not having any femoral pores.

Gen. 2. GECKO.

1. G. verus.

Lacerta Gecko. Linn. Syst. Nut. i. 365. 21. Gecko verus. Merrem, Rept. i. 42. 12. Platydactylus. Cuv. Regne An. ii. 45. Icon. Seba, i. t. 108.

Gen. 3. HEMIDACTYLUS.

A drawing of a species of this genus, with its young, is in the collection; but at present we do not venture to describe it.

Gen. 4. EUBLEPHARIS. n. g.

Digitis 5. 5. subæqualibus simplicibus conicis brevibus unguiculatis; poris subanalibus distinctis; caudâ cylindricâ, verticillatâ.

This genus is separated from the other genera of the simple toed Geckos, by being furnished with distinct subanal pores, and also by the form of the toes, which are very short and conical.

1. E. Hardwickii, n. s.

Supra fusca, fasciis quatuor albis; dorsi squamis parvis subconicis; infra albida.

Eublepharis Hardwickii. Gray, Phil. Mag. June, 1827. Inhabits Chittagong, Gen. Hardwicke. Penang.

Blackish brown, above pale, under parts and limbs whitish, with a pale band from the lips, extending over the ears, and forming a horse-shoe over the back of the head; another lunate band on the middle of the back, a transverse band over the hind legs, and one or two on the tail. The front of the head and lower part of the body and limbs are covered with small roundish flat

scales; the back and upper part of the limbs are protected with large oval scales, each slightly elevated in the centre, and separated from one another at the base by a series of minute granulated scales. The tail, which is round at the base and slightly compressed at the extremity, is covered with small irregular flat scales; and is narrowed at equal distances into 16—18 ring-like contractions, which are more visible in the centre, and gradually disappear at each end. Each of these bands is furnished with a series of large orbicular subconical scales on the edge. The labial scales, especially of the upper lip, are very long and narrow. The edge of the eye-lid is reflexed and expanded; femoral pores 8—9 on each side, in a triangular series; toes very short.

Length of the animal $7\frac{1}{2}$ inches; of head and body 4 inches; tail $3\frac{1}{2}$ inches.

Gen. 5. CYRTODACTYLUS. n. g.

Digitis 5. 5. apice compressis, retroflexis dein incurvatis, un= guiculatis; poris femoralibus nullis; caudâ cylindricâ.

This genus belongs to that group of the family which differs from the type in the toes being destitute of those scales on the under side which enable them to climb on perpendicular surfaces; but it is known from the other genera of this section by the peculiar form of the toes, which are arched at the end, that is to say, the third joint is very short, and forms a right angle with the second; the fourth then goes off horizontally from it, and the joint bearing the claw is bent down at the end, so as to give the foot a very peculiar appearance.

1. C. pulchellus. n. s.

Supra pallidé fuscus, subaculeatus, fasciis purpureis duodecim latis; iufra lævis, pallidus; superciliis denticulatis explanatis, interné purpureo-brunneis.

C. pulchellus. Gray, Phil. Mag. June, 1827. Inhabits Penang.

The head is very much depressed, and smooth; the labial scales' broad, short, quadrangular; the frontal ones of both jaws triangular, with two scales on their upper edge; eyes very large, the

lids expanded, plaited on the edge, and purple within; the back is minutely scaly, with numerous polished, round-based trihedral tubercles, of the colour of the part on which they are placed.

The scales of the chin are small and smooth; those of the abdomen larger, imbricate, circumscribed on the side of the body by a slightly crenulated raised edge of tubercles, and separated from the smaller scales of the hinder part of the thighs by a series of larger scales, which just occupies the place usually filled by the femoral pores; the lower surface of the tail is furnished with a central series of broad short scales.

The upper surface is pale brown, with a broad horse-shoe-shaped purple-brown band edged with white, passing from the back of each eye over the ear to the back of the head; a similar band extends over the shoulders, and then follow three rings of the same colour on the body, and seven on the tail.

Length of the body 3 inches; of head $1\frac{1}{2}$; of tail -?

Fam. V. VARANIDÆ. Gen. 1. MONITOR.

The animals of this genus are aquatic; they have the tail above compressed and keeled, and beneath rounded, and the nostrils ovate, small, placed laterally, nearer the tip of the nose than the eye.

1. M. elegans.

Tupinambis elegans. Daudin, Rept.?

Tupinambis bivittatus. Kuhl, Beitr. 123. Boić, Isis, 1826. 1. 205.

Monitor élégant de l'Archipel des Indes. Cuv. Regne Anim. ii. 24.

Monitor de Java. Cuv. Oss. Foss. v. 288.

Varanus elegans. Merrem, Rept. 58.

Inhabits Cawnpore and Dheliah, near Futtehghur.

The nostrils are placed at less than half the distance from the tip of the nose to the cye; the head is plain olive, with two darker streaks over the ears, and some yellow bands on the front of the nose, by which it is to be distinguished from the African Monitor, *T. elegans*, Kuhl, well figured by Petiver(Gaz.t.15.f. 6.).

VOL .III.

The number of bands of spots, and their size, appear to vary by age.

Called Bis Kupra, or Bis Copra at Cawnpore, and Gosaump at Dheliah.

2. M. flavescens. n. s.

Naribus rostri apici quam oculis propinquioribus; carinâ elevatâ utrinque supra dorsum; digitis validis brevibus subæqualibus; squamis magnis flavis brunneo-rufescente marmoratis; caudâ corpore duplo feré longiore.

Inhabits India.

Nostrils one-third the distance from the end of the nose to the angle of the eye. Body with a raised keel on each side of the back, just above the legs. Toes strong, short, nearly equal. Scales large, yellow, mottled with reddish-brown. Tail nearly twice as long as the body. Tail $14\frac{1}{7}$. Body 8 inches. There is another drawing, apparently of this species, with the body 13 and the tail 18 inches long. From a drawing.

Gen. 2. VARANUS.

Tail round and triangular. Nostrils an oblique slit, placed near the angle of the eye. Teeth sharp, compressed. Terrestrial.

1. V. Scincus.

Tupinambis griseus. Daud. Rept. viii. 362.

Monitor terrestre d'Egypte. Cuv. Regn. Anim. ii. 25.

Ouran de Forskal. Geoff. Rept. d'Egypte.

Varanus Scincus. Merrem, Rept. 59.

The Scincus of the Ancients, according to Prosper Alpinus.

Crocodile terrestre d'Herodote.-Cuvier.

Animal Lacertosum. Prosper Alp. H. N. Ægypt. 217. Icon. Prosper Alp. Ib. t. 11. Geoffroy, Rept. d'Egypte, t. 3. f. 2.

Inhabits Futtehghur.

A drawing of this animal differs slightly from the specimen in the British Museum from Tripoly, collected by Mr. Ritchie, which agrees exactly with Geoffroy's figure in colour; the upper part of the body is pale, with three irregular-edged broad, and the belly with four narrow black, bands. The tail also is annulated.

997

ORDER HI. SAUROPHIDII. Fam. 1. SCINCIDE.

Gen. 1. TILIQUA.

The toes of this genus are simple, cylindrical, not fringed. Body fusiform, and the head covered with one rostral, one anterior and two posterior frontal, one anterior vertebral, two occipital, a posterior vertebral, and four posterior occipital shields.

1. T. carinata.

Scincus carinatus. Schneid. Hist. Amph. ii. 183. Daud. Rept. iv. 304. Icon. ———— ?

Inhabits gardens, Dumdum.

A specimen preserved in spirits agrees well with Schneider's description of his second specimen. In a drawing of the species, the animal is represented as golden green on the back, with a golden yellow band commencing at the nose, and running over the eyebrow along the side of the body, a little behind the hind legs; the sides are purplish, darker above near the yellow streak; the scales of the upper parts are strongly ribbed, and these of the lower parts sexangular and polished.

There is a drawing of a *Scinc*, supposed by the natives to be the young of this species, which is pale golden green above and yellow beneath, with a pale whitish border and scattered black spots on each side, just over the legs.

2. T. trivittata. n. s.

Supra pallidé brunnea; dorso fasciis flavis tribus latis nigromarginatis; lateribus pallidis maculis nigris ratis; subtus albida.

Inhabits gardens, Dumdum.

Length, 81; Body, 41; Tail, 4 inches.

Above pale yellowish-brown, with three broad yellow bands on the back edged with black; the bands are two series of scales broad, and have two series of scales between each of them, the yellow situated on the two inner halves of the two series, and the black occupying the other outer halves of the scales; sides paler, with a few black spots; beneath whitish; under the eye a black streak. The tail banded like the back, very nearly as long as the body; ears denticulated in front; toes rather short. From a drawing.

228 Gen. Hardwicke & Mr. Gray, on the Saurian Reptiles, &c.

Is this the S. trilineatus, Schneid. ii. 202.? The scales of the tail are uniform.

Gen. 2. Lygosoma, n. g.

Corpore caudâque longis cylindricis, caudâ parum attenuatâ, squamis paribus imbricatis tectâ; pedibus quatuor breviusculis, digitis 5. 5. inæqualibus unguiculatis; capite scutato; auribus depressis parum vero occultis.

Body long, cylindrical. Tail long, cylindrical, slightly attenuated; equally covered with imbricate scales. Legs 4. rather short. Toes 5. 5. unequal, clawed. Head shielded. Tympanum of the ears sunk, but distinct.

Head with one rostral, one anterior and one posterior frontal, a large anterior and a small triangular posterior vertebral, and two oval occipital shields.

The animals of this genus are separated from the *Scincs* by the cylindrical form of their body and tail, and the shortness and weakness of their legs. They agree with them in the scales, number of toes, and in having a visible tympanum, which separates them from the *Anguis quadrupes* of Linnæus. They are separated from *Seps* by the form and number of their toes.

1. L. serpens.

Corpore supra aureo-subfusco nitente, subtus albido, lineis nigris longitudinalibus multis; squamis hexagonis; caudæ cærulescentis lineis interruptis.

Lacerta serpens. " Bloch, Besch. Berl. Naturf. ii. 28."

Gmel. Syst. Nat. 1078. 75. excl. syn. Linn.

Scincus brachypus (pars.) Schneid. Amph. ii. 192.

Seps pentadactylus (pars.) Daud. Rept. iv. 325.

Chalcide Serpentin. Latreille, Hist. Rept. ii. 87.

Icon. " Bloch. Ibid. ii. t. 2." Gmel.

Inhabits India. Java, Dr. Horsfield.

Body, above shining golden brown, beneath whitish, with 16—18 longitudinal black lines, scales sexangular, with a line between each series. Tail bluish, with the lines interrupted. Length, 8 inches. Head to fore-legs, $\frac{3}{4}$ inch; to hind-legs, $2\frac{1}{2}$. Tail, $3\frac{1}{2}$ inches.

Rev. Mr. Berkeley on Modiola, &c.

This may perhaps be the animal indicated by Boié, as Seps multilineata.

The Scincus, n. 43. Gronovius, Zooph. p. 11., an animal in the British Museum, figured by Seba, vol. ii. t. 12. f. 6., and the Lacerta abdominalis of Thunberg, appear to belong to this genus.

ART. XXIII. A short account of a new species of Modiola, and of the animal inhabitants of two British Serpulæ. By the Rev. M. J. BERKELEY.

MODIOLA RHOMBEA.

(Tab. Supp. XVIII. fig. 1. magnitudine nat. et lente aucta)

Mod. testá tenui, rhombeâ, gibbosâ, plicis transversis subcrenulatis, posticè obscuris, costisque longitudinalibus; umbonibus prominulis incurvis.

A single specimen was dredged up at Weymouth, Aug. 1826, adhering by a Byssus to a large mass of slate. Length from the umbo to front margin, 2 lin.

SERPULA ARUNDO.

(Tab. Supp XVIII. fig. 2. lente bis aucta)

Serp. testà solitarià, vel fasciculatà, primum repenti, costellis quatuor plus minusve obsoletis longitudinalibus, rugisque intermediis transversis; demum adscendente, transversim rugoso-striatà.

Animal, corpore elongato, depressiusculo; posticè attenuato, segmentis sub-nonagenis, ultimis ciliațis, albido-flavescente, fasciâ longitudinali obscuriore; anticè, areâ dorsali oblongâ plumbeâ, lineâ centrali fusco-nigrescente inter duas lineas fuscas; subtus lineâ fuscâ inter duas fusco-nigrescentes; pallio crispato, utrinque incarnato, anticé virescente; fasciculis utrinque septem aureis, quorum anteriores confertiores; subter quemque fasciculum, pallio maculâ coccineâ insigni; branchiis duabus terminalibus, flabellatis; digitationibus pennaceis numerosis coccineis, fasciis punctisque concoloribus vel albis; operculo nullo.

Serpula Arundo. Tart. Conch. Dict. p. 155.